Exhibit 4:

Expert Report on Class Data (Alcala, Prescott, Hanson)

Amended Report of

German Marquez Alcala, James J. Prescott and R. Karl Hanson Re: Class Data in *Does III v. Whitmer*

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EXECUTIVE SUMMARY

- 1. As of January 24, 2023, there were 45,145 people subject to Michigan's Sex Offenders Registration Act (SORA), of whom about 98% (44,154 people) live, work or go to school in Michigan, or are incarcerated in Michigan. The other 991 (2%) have moved out of state but remain subject to SORA.¹
- 2. Of the 44,154 registrants in Michigan, 80% (35,235 people) are living in the community, and 20% (8,919 people) are incarcerated.
- 3. 98% of registrants (44,076 people) are male and 2% (1,063 people) are female. 72% (32,582 people) are white, 25% (11,119 people) are Black/African-American, and 3% (1,444 people) are other races.
- 4. Sexual recidivism risk declines with age. Of registrants living in the community, 8% (2,896 people) are over 70; 19% (6,737 people) are 60-69; 24% (8,554 people) are 50-59; and 25% (8,956 people) are 40-49. Only 23% of registrants living in the community (8,092 people) are under age 40.
- 5. 73% of registrants (32,937 people) are Tier III registrants who are subject to SORA for life. 20% of registrants (8,887 people) are Tier II registrants who are subject to SORA for 25 years. 7% of registrants (3,191 people) are Tier I registrants, subject to SORA for 15 years.
- 6. 90% of registrants living in the community (31,632 people) in Michigan are on the online registry.
- 7. 10% of registrants currently subject to SORA have been convicted of a subsequent registrable offense (4,000/41,133, based on current registrants ever released to the community). Conversely, 90% of the registrants have not been convicted of a new sexual offense after their initial registration. Of registrants

This report has been revised from an earlier report, issued on June 21, 2023, in response to Defendants' concern that the original report included all people who had left Michigan as part of the total class. As explained in Plaintiffs' Reply to Defendants' Response to Class Data Report, ¶2-7, SORA specifically provides that non-residents who were convicted in Michigan on or after July 1, 2011, must register, although SORA exempts them from ongoing reporting requirements. M.C.L. § 28.723(3). In addition, because past registration obligations in Michigan can trigger registration obligations in other states, prior Michigan registrants may be impacted by this Court's decision. It is not completely clear, however, given the class definition, whether the Left Michigan Group and Primary Class totals should exclude people who are not currently subject to SORA, but will be if they return to Michigan. In order to be as conservative as possible in our report, we have re-run the data and edited the report using the narrower description of the Left Michigan Group (limited to departed registrants with a registrable Michigan conviction on or after July 1, 2011).

living in the community in Michigan, 93% (32,609) have never been convicted of a subsequent registrable offense.

- 8. The overall recidivism rates fail to account for the fact that different registrants have been in the community for varying amounts of time. Using a fixed five-year follow-up period, the observed recidivism rates varied between 2.9% and 4.9%. Using a fixed 10-year follow-up period, the observed recidivism rates varied between 5.7% and 7.2%. (To be clear, these numbers refer to individuals who are re-convicted at least once after their initial registrable convictions.) These recidivism rates are on the low end of the range observed for contemporary sexual recidivism studies in the U.S.
- 9. Statistics from the most recent cohorts provide the best estimate of the likelihood of recidivism. The recidivism rates in the more recent cohorts (2010 2014) were lower than for older cohorts (1995 1999). The more recent rates indicate that the vast majority of people being put on the registry today—93% to 95%—would not be convicted of another registrable offense over a 10-year follow-up period.
- 10. The amount of time that a person has spent recidivism-free in the community is strongly correlated with reductions in risk. Of registrants living in the community, 31% have been living in the community without a new sex offense conviction for more than 20 years, 15% for 15-20 years, 18% for 10-15 years, 18% for 5-10 years, 12% for 2-5 years, and 7% for 0-2 years.
- 11. The number of registrants who have been in the community without incurring a new registrable offense allows for the estimation of the overall number who would present very low risk of sexual offending. Very low risk of sexual offending is defined here as the expected lifetime rate of a first-time sexual offense conviction for males in the general population, approximately 2%.
- 12. Applying normed research on the recidivism rates for people who have been living in the community without a new sex offense conviction, it is reasonable to conclude that there are between 17,000 and 19,000 people on Michigan's registry who are no more likely to be convicted of a sexual offense than males in the general population.
- 13. In addition, there are thousands more whose projected risk level is only somewhat above the 2% rate for males in the general population. The rate for those registrants is comparable to that of first-time detected sexual offending by individuals who have a nonsexual criminal conviction but no history of detected sexual offending (3-4% lifetime rate), and who—like males in the general population, are not on the registry. For example, 25% of registrants (11,330 people) are

- 60 years of age or older. The recidivism rates of registrants who are over 60 is in that same 3-4% range.
- 14. The Michigan Department of Corrections does an average of 143 Static-99/R risk assessments for class members per month. On the previous version of the Static-99 (which used different risk categories), 36% scored low risk; 34% scored low-moderate risk; 22% scored moderate-high risk; and 8% scored high risk. Using the current version of the Static-99R risk levels, 7% scored very low risk; 19% scored below average risk; 43% scored average risk; 22% scored above average risk; and 9% scored well above average risk. In both scoring systems roughly 70% of registrants scored at average or below-average risk. These risk distribution scores are comparable to those in national samples.
- 15. Of registrants living in the community who had Michigan convictions, 84% had offenses other than criminal sexual conduct in the first degree. These data belie the common assumption that people on the registry have almost all committed the most serious offenses.
- 16. 94% of registrants (42,294 people) have Michigan convictions, while 7% (3,100 people) have convictions from other jurisdictions.
- 17. Women make up only a tiny fraction of registrants. They have very low recidivism rates. Of women registrants in the community, 98% have never been convicted of a second registrable offense.
- 18. 5% of registrants (2,037 people) are subject to SORA for a juvenile adjudication (as a child). Of those for whom it was possible to calculate the age at the time of offense, 3% (52 people) were under 14 at the time of the offense; 19% (312 people) were 14 years old; 35% (569 people) were 15 years old; 30% (480 people) were 16 years old; and 13% (215 people) were 17 years old. 99% have never been convicted of a second registrable offense. Many of these children committed their offense years ago. 76% are now 30 years of age or older.
- 19. **SORA's tier levels are inversely correlated to risk**: people in Tier I have the highest risk scores on the Static-99R, Tier II the next highest, and Tier III the lowest. Specifically, 63% of the people in Tier I were above average risk on Static-99R, compared to 44% of the people in Tier II, and 28% of the individuals in Tier III. Tier III registrants have also spent more time recidivism free in the community than Tier I registrants, who have spent more time recidivism free in the community than Tier I registrants.
- 20. **45% of class members living in the community (16,005 people) reported no current employment**. The unemployment rate in Michigan in January 2023 (when the Michigan State Police ran the class member data) was 4.3%.

- 21. 12% of class members living in the community who have reported addresses for at least ten years have reported being without housing at some time.
- 22. Among class members living in the community who are required to report email and internet identifiers (i.e., those with an offense date after July 1, 2011), only 62% (5,061 people) reported any email address or internet identifier. Only 60% (4,909 people) reported using email, and only 24% (1,968 people) reported using some other non-email internet identifier (e.g., Facebook, Instagram). By contrast, 93% of adult Americans use the internet.
- 23. Among registrants in the community, 10% (3,582 people) are listed as non-compliant. 87% of these instances of non-compliance relate to issues with identification (maintaining an ID) or paying fees required under SORA.
- 24. There are approximately **45,145 people** in the **Primary Class** (as of January 24, 2023). Determining membership of the subclasses was relatively simple for some of the subclasses, and quite complicated for others. While work to confirm the composition of the subclasses is continuing, the best estimates at this time are:
 - a. There are approximately 31,249 people (69% of the class) in the Pre-2011 Ex Post Facto Subclass.
 - b. There are approximately 16,723 people (37% of the class) in the Retroactive Extension of Registration Subclass, although this number is a very rough estimate, subject to revision.
 - c. The composition of the **Barred from Petitioning Subclass** has not yet been ascertained.
 - d. There are an approximately 276 people with Michigan convictions in the Non-Sex Offense Subclass, and an estimated 22 people with convictions from other jurisdictions in this subclass, for a total subclass size of about 298.
 - e. The composition of the **Plea Bargain Subclass** has not yet been ascertained.
 - f. There are approximately 13,848 people (31% of the class) in the Post-2011 Subclass.
 - g. There are approximately 3,100 people (7% of the class) in the Non-Michigan Offense Subclass.

I. QUALIFICATIONS

25. This report was a collaborative project between German Marquez Alcala, James J. Prescott, and R. Karl Hanson. Dr. Prescott is Henry King Ransom Professor of Law at the University of Michigan Law School in Ann Arbor, Michigan, where he also holds an appointment in the Economics Department and co-directs the Law and Economics Program and the Empirical Legal Studies Center. Dr. Hanson is a psychologist and Adjunct Research Professor in the Psychology Department of Carleton University, Ottawa, Ontario, Canada. Dr. Prescott and Dr. Hanson have both provided other expert reports in this litigation, and their qualifications are set out in those reports, which are incorporated herein by reference. See ECF 1-4, 1-6. German Marquez Alcala is the Research Associate for Empirical Legal Studies at the University of Michigan Law School in Ann Arbor, Michigan, where he has provided full-time empirical research support for law faculty since 2019. Mr. Marquez Alcala received an M.A. in Economics from the University of Michigan in 2018, an M.S. from Purdue University in 2016, and a B.S. with honors from California State University, Fresno in 2014. Mr. Marquez Alcala's curriculum vitae is attached as Exhibit A.

II. METHODOLOGY

- 26. We were asked to analyze data obtained by Plaintiffs' counsel through discovery related to Michigan's Sex Offender Registry. The data were obtained from the Michigan State Police Sex Offender Registration Unit ("MSP") and from the Michigan Department of Corrections ("MDOC").
- 27. The largest data sets—which were from MSP—were provided on January 24, 2023. The MDOC data were provided between March 8, 2023, and April 19, 2023.
- 28. The MSP data set contained information from Michigan's sex offender registry database for 53,605 registrants. After obtaining the MSP data, we provided a class member list to the MDOC. Pursuant to subpoena, the MDOC then provided data from MDOC databases regarding class members.
- 29. In order to conduct the data analysis discussed in this report, we imported the different data sets into Stata, which is a statistical software program. We cleaned the data, matched the MSP and MDOC data, and used tools within Stata to analyze the data, as further discussed below.

III. CLASSIFICATION OF REGISTRANTS FOR ANALYTICAL PURPOSES

- 30. In order to conduct the analysis in this report, we first had to classify registrants into different groups. When analyzing the data, we used certain subgroups within the full data set to answer particular research questions. We needed to account for limitations in the data (e.g., data about people with non-Michigan convictions and people who have left Michigan are less robust), and we needed to match the available data to the questions we were trying to answer. Accordingly, at the outset, we explain the different categories of registrants that we created for data analysis purposes. A chart with more information about how each group was identified is attached as Exhibit B. Information about the subclasses is set out in Section XV.
- 31. <u>Total Registrants</u>: As of January 24, 2023, there were **45,145** people who are subject to Michigan's Sex Offenders Registration Act. We will use the terms "<u>Primary Class</u>" or "<u>total registrants</u>" to describe the full group. This includes people living, working, or going to school in Michigan; people who are incarcerated in Michigan; people who are and who are not on the public registry; and people with Michigan convictions on or after July 1, 2011 who were required to register in Michigan in the past but have moved out of state (*see* M.C.L. § 28.723(3)).²
- 32. <u>In Michigan Group</u>: Of the 45,145 people on Michigan's registry, **44,154** people (**98%**) are registrants who live, work, or go to school in Michigan, or who are incarcerated in Michigan.³ For purposes of this report, we call this set of class members the "In Michigan Group."
- 33. <u>In Community Group</u>: Of the 44,154 people in the In Michigan Group, 35,235 people (80%) are not incarcerated. These are people who <u>live</u>, work or go to school in Michigan, and are subject to SORA's verification and ongoing reporting requirements. The registry focuses on these people because they are the ones who are present in Michigan communities. We call this set of class members the "<u>In</u> Community Group."
- 34. <u>Incarcerated Group</u>: Of the 44,154 people in the In Michigan Group, **8,919** people (**20%**) are incarcerated. These individuals do not need to report to law enforcement while incarcerated, but will need to report upon release. If they are

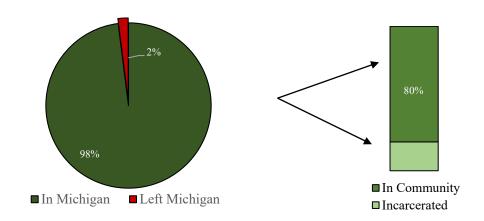
² In the initial version of this report, we had included all 53,605 people for whom the MSP provided data. As explained in footnote 1, this amended report adopts a more conservative approach.

³ The In Michigan Group also includes a very small number of people whose cases are "pending review" or "pending out of state," or whose whereabouts are uncertain. *See* Exhibit B for more details.

subject to public registration, they appear in the online registry while incarcerated. We call this set of class members the "Incarcerated Group."

35. <u>Left Michigan Group</u>: There are **991** people, about **2%** of the primary class (total registrants), who were previously registered in Michigan and have Michigan convictions on or after July 1, 2011, but have moved out of state. They also do not work or attend school in Michigan. These people do not have ongoing reporting obligations in Michigan and are not listed on the online registry. They remain subject to SORA, however, and may have registration obligations in other states as a result of their Michigan registration requirement. M.C.L. § 28.723(3). We call this set of class members the "Left Michigan Group."

Figure 1: Class Profile



36. <u>Michigan Conviction Group</u>: There are 42,294 people, about 94% of the primary class (total registrants), who have one or more registrable convictions⁵ from Michigan. In part because the data we received from the MDOC relates only to people with Michigan convictions, there are a number of research questions where we restricted our analysis to people with Michigan convictions. We call this set of class members the "<u>Michigan Conviction Group</u>."

⁴ The differences between the initial report and this amended report almost entirely reflect the fact that we had previously identified 9,451 people as being in the Left Michigan Group. Because we have adopted a more conservative approach (removing people who do not have Michigan convictions from on or after July 1, 2011, even though their past registration in Michigan could trigger registration requirements in other states), the number in the Left Michigan Group shrunk to 991.

⁵ For simplicity, throughout this report, the term "conviction" is used to include both adult convictions and juvenile adjudications.

IV. DEMOGRAPHICS OF PEOPLE ON MICHIGAN'S REGISTRY

- 37. Gender Demographics: Of the total registry population of 45,145, about 44,076 (98%) are male, and about 1,063 (2%) are female.⁶ The percentages are similar for the In Community Group, where, of 35,235, about 34,285 (97%) are male, and about 945 (3%) are female.
- 38. **Racial Demographics:** Based on the information in the "race" field, of the total registry population:
 - about 32,582 (72%) are white;
 - about 11,119 (25%) are Black/African-American;
 - about 653 (1%) are Latino/Hispanic;
 - about **791 (2%)** are other groups.

For the In Community Group, the percentages are similar:

- about **26,416** (75%) are white;
- about 7,962 (23%) are Black/African-American;
- about 315 (1%) are Latino/Hispanic;
- about 542 (2%) are other groups.
- 39. The data indicates that Black people are over-represented on the sex offender registry. Black people make up **14.1%** of the Michigan population, but make up **25%** of the registry population.
- 40. <u>Age Demographics</u>: For the **total registry** population, the average age is 49.4 years.⁸ The **current** age distribution is:
 - only 1 person (0.002%) is under 16 years old;
 - about 71 (0.2%) are 16 19 years old;
 - about 3,139 (7%) are 20-29 years old;
 - about 8,607 (19%) are 30 39 years old;

⁶ The data lists virtually all registrants as either male or female; 6 people (0.01%) are listed as of unknown gender.

⁷ QuickFacts Michigan, United States Census Bureau, https://www.census.gov/quickfacts/MI.

⁸ This figure reflects the fact that most registrants are on the registry for 25 years or for life, and that the registry has existed since Michigan's registry law first came into effect in 1995.

- about **11,409 (25%)** are 40 49 years old;
- about **10,588 (23%)** are 50 59 years old;
- about 7.954 (18%) are 60 69 years old;
- about **3,376** (7%) are over 70 years old.

For the **In Community Group**, the average age is 50.5 years, and the **current** age distribution is:

- only 1 person (0.003%) is under 16 years old;
- about 65 (0.2%) are 16 19 years old;
- about 1,923 (5%) are 20 29 years old;
- about 6,103 (17%) are 30 39 years old;
- about **8,956** (25%) are 40 49 years old;
- about **8,554 (24%)** are 50 59 years old;
- about **6,737** (**19%**) are 60 69 years old;
- about **2,896** (8%) are over 70 years old.

41. The age distribution is important because, as set out in the expert report of R. Karl Hanson, ECF 1-4, ¶¶ 3.c, 26, sexual recidivism risk declines with age. For individuals over age 60, recidivism rates are particularly low. Previous research has found that the five-year sexual recidivism rate of individuals released over the age of 60 to be in the range of 3% to 4%. 9,10 This rate is only slightly higher than the base rate of first-time sexual offending among individuals with a criminal history but no current or prior sexual offense convictions (2% after five years). Although people over the age of 60 are rare in sexual recidivism studies, they are not rare among registrants in Michigan. Of the **total registry** population, **11,330** (25%) are

⁹ Helmus, L, Thornton, D, Hanson, RK, & Babchishin, KM. (2011). Improving the predictive accuracy of Static-99 and Static-2002 with older sex offenders: Revised age weights. *Sexual Abuse*, 24(1), 64-101. Out of 598 men released after the age of 60, 21 (3.5%) were known to have committed another sexual offense after five years of follow-up.

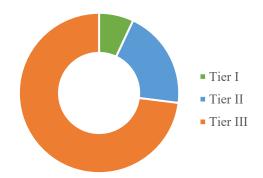
¹⁰ Skelton, A, & Vess, J. (2008). Risk of sexual recidivism as a function of age and actuarial risk. *Journal of Sexual Aggression*, 14(3), 199-209. Out of 562 individuals over the age of 60, 19 (3.4%) were reconvicted for another sexual offence after an average 10-year follow-up period.

60 or older. Among this group, there are 3,376 over the age of 70 (7% of the total).

V. TIER CLASSIFICATIONS AND PUBLICATION OF INFORMATION

- 42. <u>Tier Classifications</u>: Of Michigan's total registry population:
 - about 3,191 (7%) are 15-year Tier I registrants;
 - about 8,887 (20%) are 25-year Tier II registrants; and
 - about **32,937** (**73%**) are lifetime Tier III registrants.¹¹

Figure 2: Tier Distribution



43. The percentages are similar for the **In Michigan Group**:

- about 3,035 (7%) are 15-year Tier I registrants;
- about 8,635 (20%) are 25-year Tier II registrants; and
- about 32,354 (73%) are lifetime Tier III registrants.

44. For the **In Community Group**, the percentages are:

- about 2,692 (8%) are 15-year Tier I registrants;
- about 7,861 (22%) are 25-year Tier II registrants; and
- about **24,557** (**70%**) are lifetime Tier III registrants.

¹¹ 130 people (0.3%) are not classified in one of the tiers, which appears to reflect that they have a special status due to court decisions, special conditions related to an out-of-state offense, or some other exception.

- 45. <u>Online vs. Offline Registry</u>: Of the 35,235 people in the **In Community Group**, about:
 - 31,632 (90%) are on the online public sex offender registry.
 - 3,603 (10%) are on the offline registry that is available to law enforcement.¹²
- 46. In addition, of the **Incarcerated Group**, there are **8,520 (96%)** who are listed on the online registry. These individuals are not living in the community, but under SORA, information about them is still posted on the public online registry.
- 47. Of the members of the **In Community Group** who are not on the public registry,
 - 1,395 (39%) are Tier I.
 - 1,859 (52%) have juvenile adjudications.
 - 353 (10%) are non-public for some other reason (e.g., a court order). 13

VI. RECIDIVISM RATES FOR PEOPLE ON MICHIGAN'S REGISTRY

- 48. We sought to determine how many registrants were convicted of a subsequent registrable offense after they were registered for the first time. Recidivism here thus means being convicted of a new sexual offense after being caught (convicted/registered¹⁴) for a previous sexual offense. It is not uncommon for individuals to be convicted of more than one sexual offense at the same sentencing occasion, or for victims of historical offenses to come forward after the publicity associated with an initial conviction. New convictions for historical offenses are not recidivism, but may look like it in criminal justice data (pseudo-recidivism) if the new conviction post-dates a previous conviction but the *offense* predates the previous conviction.
- 49. In order to separate recidivism from pseudo-recidivism, we first have to define the "index offense"—meaning the offense or offense cluster from which one measures whether there has been a subsequent registrable offense. For the index

¹² In addition, registrants who are no longer in Michigan (the Left Michigan Group) are not on the public online registry.

¹³ Four people of the In Community Group who are not on the public registry are Tier I and also have juvenile adjudications.

¹⁴ The most common outcome criteria in sexual recidivism studies are either arrest/charges or convictions. Our analyses used convictions because that was the data provided to us. Although somewhat higher rates would be observed if police arrest/charge data were used, the current analyses are comparable to the sexual recidivism studies routinely conducted by other researchers.

offense, we used the first offense responsible for the individual being placed on the registry. If there were multiple counts or convictions on the same date, those were counted as part of the index offense. Sexual offense convictions that occurred after the index sexual offense conviction that were based on crimes committed prior to the index sexual offense conviction were included as part of the index sexual offense (i.e., pseudo-recidivism). This rule applied even when the conviction date for the additional offenses was long after the date of registration. In addition, convictions that occurred within 30 days of one another were counted as a cluster of offenses comprising the index offense. The most likely reason for closely associated sentencing occasions is that multiple historical charges were dealt with in separate court appearances, and do not constitute new offending. The length of time between the sexual offense commission and conviction for such behavior is almost always more than 30 days: it can take years to complete the process of police investigation, charge, conviction, and sentencing. In contrast, it is common that when individuals have more than one sexual offense charge, these charges come before the courts on separate dates.

- 50. We define a "subsequent registrable offense" to be any conviction requiring registration under SORA that occurred after their first registrable offense (i.e., after their index offense).
- 51. Of the 41,133 registrants currently subject to SORA who have ever returned to the community following their initial registrable offense conviction, ¹⁵ about 90% (37,133) have never been convicted of a subsequent registrable offense. About 10% (4,000) have been convicted of at least one subsequent registrable offense.
- 52. If one looks at the **In Community Group**—that is, those non-incarcerated registrants who are present in Michigan communities—the percentage of registrants who have never been convicted of a subsequent sexual offense was slightly higher. We found that, of the 35,199 in that group who have ever returned to the community following their initial registrable offense conviction, about 93% (32,609) have never been convicted of a subsequent registrable offense, while 2,590 (7%) have been

¹⁵ Of the 45,145 total registrants, about 9% (3,898) are currently incarcerated for their first registrable offense and, therefore, have not had the opportunity to commit a subsequent registrable offense in the community. Another 78 from the Left Michigan Group and 36 from the In Community Group are not officially classified as incarcerated, but only have incarceration-related addresses without respective end dates (i.e., the date at which the respective address is no longer current) in the MSP data, so we cannot determine whether these individuals have ever been released into the community following their first registrable offense conviction. For the purpose of our recidivism analysis, we exclude all 4,012 of these individuals (9% of total registrants) from our calculations.

convicted of a subsequent registrable offense.

- 53. The above figures overestimate the rate at which registrants have recidivated because they fail to account for registrants who have successfully completed their registration term without reconviction and are no longer on the registry. The data set only includes people subject to registration as of January 24, 2023.
- 54. The above figures also **overestimate the future recidivism rate** for individuals currently on the registry and living recidivism free in the community because these statistics are backward looking. The vast majority of registrants currently on the registry have already lived in the community, sometimes for decades, without reoffending, whereas the 7% and 10% figures are an average reoffense rate across all at-risk years for all registrants. These statistics are driven entirely by those registrants who recidivated in the past and who are therefore less likely to be in the community. Thus, the 7% and 10% figures presented above cannot be interpreted as the likelihood of *future* recidivism for individuals *currently on the registry*. Instead, those numbers only describe the proportion of registrants known to have offended in the past during their time on the registry, and who are potentially very different from registrants who have lived offense free. It is important not to conflate prior offenses committed by a small fraction of registrants with the possibility of future offenses by other registrants.
- 55. The above figures also **overestimate the future recidivism rate** for individuals currently on the registry and living recidivism free in the community because the figures draw from an unrepresentative sample of registrants. Because recidivism declines with age and the amount of time lived offense free, the forward-looking recidivism risk of those who have been in the community for years is much lower than the average re-offense rate for all registrants. The average age for registrants in the community (50.5 years old) is higher than the average age for registrants at the time they join the registry. Thus, the individuals currently on the registry and in the community are older and, by definition, have been offense-free for much longer than an individual newly placed on the registry. The recidivism risk of those who are currently on the registry and in the community is necessarily much lower than the average re-conviction rate for all past registrants.
- 56. The above figures are also hard to interpret because the 7% and 10% figures do not consider the length of time that individuals were at risk in the community. Individuals released decades ago will have many more years at risk than people released more recently. Recidivism rates are only informative when the follow-up period is specified.
 - 57. To address these problems, we divided the data into 5-year cohorts based on

release dates¹⁶ (namely, 1995–1999, 2000–2004, 2005–2009, and 2010–2014¹⁷). For each 5-year cohort, we calculate the recidivism rate at four follow-up intervals: 5, 10, 15, and 20 years after registrants' first release date (i.e., the release date after their first conviction for a registrable offense). The recidivism rates at each of those intervals for each respective 5-year cohort are the following:

<u>Table 1</u>
<u>Cumulative Recidivism Rates by 5-year Cohorts, Based on Release Date</u>¹⁸

Cohort	Pop.	5-year	10-year	15-year	20-year
1995–1999	8,210	4.9%	7.2%	8.9%	10.3%
2000-2004	7,681	4.5%	6.6%	8.5%	N/A
2005-2009	6,458	3.7%	5.7%	N/A	N/A
2010-2014	5,227	2.9%	N/A	N/A	N/A

58. The 5-year sexual recidivism rate varied between 4.9% for the 1995-1999 cohort to 2.9% for the 2010-2014 cohort. The 10-year rates were between 5.7% and 7.2%. These values are on the low end of the range observed in contemporary sexual recidivism studies. For example, the average 5-year sexual recidivism in the 2021 Static-99R norms is 6.7%. The average 10-year sexual recidivism rate in the Static-99R norms was 11.6%. Although the rates in this analysis of Michigan's registry were relatively low, other jurisdictions have observed very similar rates. For example, the five-year sexual recidivism rate for the 2005-2009 cohort in this analysis of Michigan registrants (3.7%) is very similar to the five-year sexual recidivism rate

¹⁶ We group individuals into 5-year cohorts for the benefit of larger sample sizes, but we calculate recidivism on individual timelines. For example, if an individual is released from their first post-registrable-offense-conviction incarceration period on January 31, 1995, the 5-year follow-up interval for that individual runs through January 31, 2000, not year-end 2000.

¹⁷ We excluded people with an index offense release date from 2015–2023 because there was not a five-year follow-up period for anybody with an initial release date after January 24, 2018.

¹⁸ The recidivism rates in this table are cumulative, meaning that each rate describes the proportion of individuals in each 5-year cohort that have been convicted of any registrable offenses that occurred after their initial release date and before the respective follow-up interval. For example, the 20-year rate captures all cohort members who have ever recidivated during the preceding 20 years, not merely those who have recidivated after the 15-year follow-up. This rate thus describes the total proportion of individuals who have been known to recidivate.

¹⁹ Lee, SC, & Hanson, RK. (2021). Updated 5-year and new 10-year sexual recidivism rate norms for Static-99R with routine/complete samples. *Law and Human Behavior*. *45*(1), 24-38. https://doi.org/10.1037/lhb0000436.

for a cohort from Connecticut released in 2005 (3.6% charged or convicted; 27/746).²⁰

- 59. Consistent with previous research, the recidivism rates of the more recent cohorts were significantly lower than for older cohorts.^{21,22} The reasons for the declining recidivism rates are not fully known. The U.S. and many other countries have become safer over recent decades, not only because the rate of violent crime has declined,²³ but also because there are fewer car accidents, fires, and drownings.²⁴ American society is more cautious and risk adverse than it was in 1995. Another possible explanation is that more recent cohorts include a greater proportion of individuals at low risk to reoffend. Cultural changes in attitudes toward sexual crime may have motivated victims in more recent years to report offenses committed by lower risk individuals that previously would not have been reported. Also, because the analysis was based on archival data, it is possible that the change is more apparent than real; even when policies dictate complete record retention, it is not uncommon for inactive cases to go missing from criminal history records, thereby increasing the perceived recidivism rates of older cohorts.²⁵ The physical and electronic mediums holding the names of registrants would likely have changed multiple times since Michigan's registry was created in 1995. Each transition increases the possibility that individuals would drop off the list; however, individuals are likely to still be on the list if they have returned for a new registerable offense. The selective attribution of inactive records would increase the proportion of recidivists in older cohorts (by decreasing the number of non-recidivists).
- 60. Regardless of the reasons for the change in recidivism rates over time, the statistics from the most recent cohorts provide the best estimates of the likelihood of recidivism for individuals who have been recently added to the registry. These

²⁰ State of Connecticut. (2012). Recidivism among sex offenders in Connecticut. Office of Policy and Management, Criminal Justice Policy & Planning Division. www.ct.gov/opm/cjppd.

²¹ Tatar, JR, & Streveler, A. (2015). Sex offender recidivism after release from prison. State of Wisconsin Department of Corrections.

²² Lussier, P., McCuish, E., Proulx, J., Chouinard Thivierge, S., & Frechette, J. (2023). The sexual recidivism drop in Canada: A meta-analysis of sex offender recidivism rates over an 80-year period. *Criminology & Public Policy*, 22(1), 125-160.

²³ Pinker, S. (2011). The better angels of our nature: Why violence has declined. Viking.

²⁴ Pinker, S. (2018). *Enlightenment now: The case for reason, science, humanism, and progress.* Penguin.

²⁵ Hanson, RK, & Nicholaichuk, T. (2000). A cautionary note regarding Nicholaichuk et al. (2000). *Sexual Abuse: A Journal of Research and Treatment, 12*(4), 289-293.

numbers indicate that out of 100 individuals <u>added to the registry this year</u>, 3 or 4 would be convicted of a new sexual offense within 5 years, and that 1 or 2 more would be convicted if the follow-up period was extended to 10 years (10-year rates of 5%-7%). In other words, the vast majority (93% to 95%) would not be convicted of another registerable offense over a 10-year follow-up period.

61. The recidivism risk of the individuals currently on the registry would be lower because most of them have been recidivism-free for many years (see discussion in Section VII, below). As documented in the report of R. Karl Hanson (ECF 1-4, ¶¶ 3.f., 55-72), the longer individuals remain recidivism-free in the community, the lower their risk of subsequent recidivism. The same patterns were evident in the Michigan registry data, as displayed by Tables 3 and 4 below. Whereas the observed sexual recidivism rates were between 3% and 5% during the first five years in the community, the recidivism rates dropped to around 2% for the next five years (years 5 to 10) for individuals who had remained sexual recidivism free during their first five years in the community. For people who remained sexual recidivism free for 15 years, their observed sexual recidivism rate was 1.4% for the next 5 years. This rate is similar to the rate of first-time sexual offending for males in the general population.²⁶

Table 2

Rates of New Recidivism of People by 5-year Cohorts,

Based on Release Date²⁷

Cohort	Pop.	5-year	10-year	15-year	20-year
1995–1999	8,210	4.9%	2.2%	1.8%	1.4%
2000-2004	7,681	4.5%	2.1%	1.9%	N/A
2005–2009	6,458	3.7%	2.0%	N/A	N/A
2010-2014	5,227	2.9%	N/A	N/A	N/A

VII. TIME OFFENSE-FREE IN THE COMMUNITY AND DESISTANCE

62. The predictable decline in risk for individuals who remain sexual offensefree while in the community allows us to estimate the proportion of individuals

²⁶ Lee, SC, Brankley, AE, & Hanson, RK. (2023-05, in press). There is no such thing as zero risk for sexual offending. *Canadian Journal of Criminology and Criminal Justice*.

²⁷ The recidivism rates in this table are not cumulative; rather, they describe the proportion of individuals in each 5-year cohort that have been convicted of a subsequent registrable offense for the first time at each follow-up interval. For example, the 20-year rate captures the proportion of cohort members who have recidivated for the first time between the 15-year and the 20-year follow-up intervals.

currently on Michigan's registry who present a very low risk of sexual recidivism. We use the term "offense-free" to refer to whether a person has recidivated (i.e., has been caught again by the criminal justice system). Although registrants may commit undetected offenses, that is also true of the public in general. As set out in Dr. Hanson's Rebuttal Report, ¶¶ 32-42, rates of undetected offending do not affect when people reach desistance (meaning the point at which they are no more likely than males in the general population to be convicted of a new sex offense). Because the detection rates for people with past convictions are, if anything, higher than for people who have not previously been convicted of a sex offense, the fact that some offending—for both people with past convictions and those without—is undetected, does not change the length of time it takes for individuals to reach the desistance threshold (i.e., the rate of detected sexual offending of males in the general population). *Id*.

- 63. To determine time offense-free, we counted time in the community based on street time, not calendar time (i.e., we excluded periods of incarceration). Registrants, depending on the seriousness of their initial offense, may spend a considerable amount of time in prison or jail. Therefore, we cannot simply look at how long it has been since class members had been convicted. Rather, we had to calculate the amount of time that class members have spent in the community since their last conviction for a sex offense.
- 64. In order to determine how long class members have spent offense-free in the community, we used address and date data to determine how long registrants had been living in the community without a subsequent registrable conviction. This analysis was done on the **In Community Group**, as those who are incarcerated are not living in the community, and the address data for those who have left Michigan is less robust and a subsequent non-Michigan conviction would not necessarily appear in the data.
- 65. We define time offense-free as any period of time following a registrant's conviction for their final registrable offense in which they are free in their community—i.e., not incarcerated. To calculate "in community" time, we excluded any period of incarceration for a non-registrable offense conviction that occurred after a registrant was either 1) released from incarceration resulting from their last registrable offense conviction or 2) convicted of their last registrable offense without receiving an incarceration sentence.
- 66. Of the 35,235 people in the In Community Group, we had sufficient information to calculate "in community" time for 35,106 people (99.6%). Of those, the data show:
 - 7% or 2,299 people have been living in the community for 0–2 years without

being convicted of another registrable offense.

- 12% or 4,222 people have been living in the community for 2–5 years without being convicted of another registrable offense.
- 18% or 6,311 people have been living in the community for 5–10 years without being convicted of another registrable offense.
- 18% or 6,218 people have been living in the community for 10–15 years without being convicted of another registrable offense.
- 15% or 5,159 people have been living in the community for 15–20 years without being convicted of another registrable offense.
- 31% or 10,897 people have been living in the community for more than 20 years without being convicted of another registrable offense.

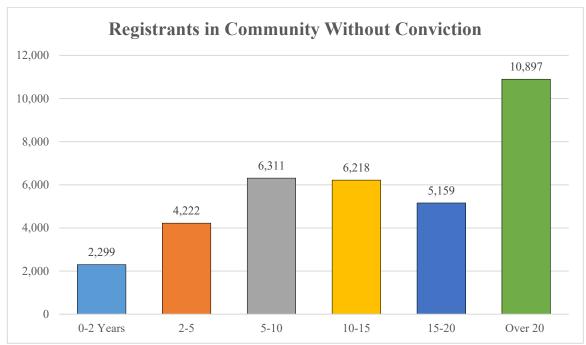


Figure 3

67. The number of registrants who have been in the community without incurring a new registrable offense allows for the estimation of the overall number who would present a very low risk of sexual offending. Very low risk of sexual offending is defined here as the expected lifetime rate of first-time sexual offending for males in

the general population, approximately 2%.²⁸ The risk of sexual recidivism predictably declines the longer that individuals are in the community without being convicted of a new sex offense. Because we did not know the proportion of registrants who incurred convictions for nonsexual offenses, the estimates are presented in two ways: a) assuming no new nonsexual convictions, and b) assuming that all registrants incurred at least one conviction for a nonsexual offense since their last registrable sexual offense. Consequently, these estimates would represent upper and lower bounds of the proportion of very low risk individuals in the **In Community Group**.

- 68. The recidivism rate estimates were drawn from previously published tables; specifically, Table S4 from Lee and Hanson $(2021)^{29}$ for individuals with no new nonsexual convictions, and Table 5 from Thornton et al. $(2021)^{30}$ for individuals with at least one conviction for a nonsexual offense. The 20-year calculations are based on the recidivism-rate estimates for 19 years because the 20-year rates are artificially set to zero in Table S4 and Table 5. The estimation method is conservative in that we use only the minimum follow-up times for the grouped data (e.g., 5 years, for the group of individuals who had been offense-free for 5 to 10 years). We assume that the distribution of initial risk levels (as measured by Static-99R scores) is equivalent to the distribution in the Static-99R normative samples, 31 which appears to be a reasonable assumption (see discussion in Section VIII below).
- 69. As can be seen from Table 3 and Table 4, approximately half of the 35,106 registrants in the community are very low risk for sexual recidivism. Assuming that those registrants did not incur a subsequent conviction for a new nonsexual offense, the number of very low risk individuals would be 19,994 (57.0%); assuming everyone has incurred at least one nonsexual conviction, the number of very low risk individuals would be 16,574 (47.2%). Consequently, it is reasonable to conclude that there are between 17,000 and 19,000 individuals in the **In Community Group** who

²⁸ Lee et al. (2023) *supra* note 26.

²⁹ Lee, SC, & Hanson, RK. (2021). Updated 5-year and new 10-year sexual recidivism rate norms for Static-99R with routine/complete samples. *Law and Human Behavior*. 45(1), 24-38. https://doi.org/10.1037/lhb0000436.

³⁰ Thornton, D, Hanson, RK, Kelley, SM, & Mundt, JC. (2021). Estimating lifetime and residual risk for individuals who remain sexual offense free in the community: Practical applications. *Sexual Abuse*. *33*(1), 3-33. doi:10.1177/1079063219871573.

³¹ Hanson, RK, Lloyd, CD, Helmus, L, & Thornton, D. (2012). Developing non-arbitrary metrics for risk communication: Percentile ranks for the Static-99/R and Static-2002/R sexual offender risk scales. *International Journal of Forensic Mental Health*, 11(1), 9-23. doi:10.1080/14999013.2012.667511.

present no more risk for sexual offending than do males in the general population.

Table 3

The number of individuals in the In Community Group (35,106) who are very low risk for sexual recidivism (lifetime rate of < 2%) assuming no new non-sexual convictions.

	Minimum Time in Community							
Risk Level Static- 99R	Frequency	At release	2 years	5 years	10 years	15 years	20 years	
	0.027	62	114	170	168	139	294	
-3 -2 -1	0.03	0	127	189	187	155	327	
-1	0.079	0	0	499	491	408	861	
0	0.103	0	0	0	640	531	1122	
1	0.157	0	0	0	976	810	1711	
3	0.175	0	0	0	1088	903	1907	
3	0.172	0	0	0	0	887	1874	
4	0.107	0	0	0	0	552	1166	
5	0.074	0	0	0	0	0	806	
6	0.036	0	0	0	0	0	392	
7	0.025	0	0	0	0	0	272	
8	0.012	0	0	0	0	0	131	
9	0.0028	0	0	0	0	0	31	
10+	0.0002	0	0	0	0	0	2	Tota
	very low							19,99
risk		62	241	858	3550	4385	10897	
Total		2299	4222	6311	6218	5159	10897	35,100

Table 4

The number of individuals in the In Community Group (35,106) who are very low risk for sexual recidivism (lifetime rate of < 2%) assuming all registrants have at least one new nonsexual conviction.

Minimum Time in Community

Risk	Frequency	Within	2	5 years	10	15	20 years	
Level	1 2	1 year	years	•	years	years	•	
Static-		•	•		•	•		
99R								
-3	0.027	0	0	170	168	139	294	
-2	0.03	0	0	189	187	155	327	
-2 -1	0.079	0	0	0	491	408	861	
0	0.103	0	0	0	640	531	1122	
1	0.157	0	0	0	0	810	1711	
2	0.175	0	0	0	0	903	1907	
3	0.172	0	0	0	0	887	1874	
4	0.107	0	0	0	0	0	1166	
5	0.074	0	0	0	0	0	806	
6	0.036	0	0	0	0	0	392	
7	0.025	0	0	0	0	0	272	
8	0.012	0	0	0	0	0	131	
9	0.0028	0	0	0	0	0	31	
10+	0.0002	0	0	0	0	0	0	Total
Number	very low							16,574
risk	-	0	0	360	1486	3833	10895	
Total		2299	4222	6311	6218	5159	10897	35,106

70. Because the 991 people in the **Left Michigan Group**, which only includes people who have Michigan convictions on or after July 1, 2011, would have spent less time in the community than the **In Community Group**, the risk profile of the Left Michigan Group does not resemble the risk profile of the In Community Group. Therefore, we cannot take the proportion of registrants in the In Community Group who are very low risk individuals and assume that a similar proportion of registrants in the Left Michigan Group would also be very low risk individuals. Additionally, we are unable to calculate the time offense-free in the community for the Left Michigan Group; consequently, we are unable to estimate the proportion of people in the Left Michigan Group who would belong to the very low risk threshold. Although there would be some individuals in the Left Michigan Group who would

be very low risk, the number of such people would be very small (in the low hundreds) compared to the number of very low risk individuals in the In Community Group (17,000 to 19,000). Consequently, including or excluding the Left Michigan Group in the overall estimate of very low risk individuals in the Primary Class would not materially change the total.

- 71. In sum, it is reasonable to conclude that there are between 17,000 and 19,000 people in the Primary Class (almost all from the In Community Group) who are no more likely to be convicted of a sexual offense than males in the general population.
- 72. Finally, it is important to recognize that there are many more people on Michigan's registry whose risk level is only slightly higher than that of males in the general population. For example, people who have a Static-99 score of 2 (a common score) reach desistance around year 10. At year 5, their lifetime recidivism risk is 4.3%, which is higher than the 2% rates for males in the general population, but not that much higher. In fact, it is similar to the rate of first-time sexual offending among individuals with a nonsexual criminal conviction but no history of sexual offending (3% to 4% lifetime rate) who are not required to register. See Hanson Report, ECF 1-4, ¶¶ ¶¶ 3.f., 55-72. Moreover, as noted above, people age 60 or older (25% of Michigan's total registry population), have recidivism rates of 3-4%. In other words, although there are 17,000 to 19,000 people whose projected risk is no greater than the 2% lifetime rate of first-time sex offense conviction for males in the general population, there are thousands more whose risk levels are only somewhat above that level and are comparable to many others who are not required to register.

VIII. USE OF RISK ASSESSMENTS AND RISK ASSESSMENT SCORES

- 73. The MDOC data included Static-99 and Static-99R results for assessments done by the MDOC since June 2016. The Static-99R is an updated version of Static-99, which was first developed in 2009; the risk levels for Static-99R were later updated in 2017. It is our understanding that Static-99/Rs have been routinely conducted by the MDOC since 2011, but that the MDOC could not easily provide Plaintiffs with data for the period from 2011-2016 due to a change in the database housing that data.
- 74. Of the 45,145 total registrants in the MSP data, we have MDOC records for 40,061 individuals (89%).
- 75. The MDOC data show that over a six year and nine month period between June 3, 2016, and March 1, 2023, at least 10,031 class members received a Static-

99/R risk assessment at MDOC. At least 1,376 of those members received multiple Static-99/R risk assessments at MDOC. **MDOC** did a total of 11,553 assessments on class members for an average of roughly 143 Static-99/R risk assessments on class members per month.

76. Because we did not have data on how many class members had a Static-99/R done before June 2016 or how many had a Static-99/R done by an entity other than the MDOC (e.g., court system, another state's department of corrections), we could not determine what percentage of the class has already had a Static-99 or Static-99R conducted. We also did not receive data regarding how many class members received risk assessments using an instrument or test other than the Static-99/R.

77. Of the 9,543 people with any Static-99/R result,³² 4,890 cases had results reported using only the original Static-99 risk levels, 4,028 cases had results reported using only the revised Static-99R risk levels, and 625 cases had results reported using both risk levels. Some proportion of cases would have their results reported using the original Static-99 risk levels even though they were scored on Static-99R because there was a gap of 8 years between the development of Static-99R (2009) and the updated risk level (2017).

78. For the 5,515 people who received the earlier version of the assessment, including those who received both the earlier and current versions of the assessment, the distribution of assigned risk levels is as follows:³³

- 1,975 (36%) scored as Low Risk
- 1,865 (34%) scored as Low-Moderate Risk
- 1,224 (22%) scored as Moderate-High Risk
- 451 (8%) scored as High Risk

79. This distribution of scores is similar to the distribution of scores in the Static-99 normative sample (31%, 42%, 18% and 9% for Low, Low-Moderate, Moderate-High, and High risk groups respectively). The Michigan data included relatively more individuals in the Low risk than the norms, probably because the original Static-99 risk levels were being applied to the updated Static-99R (which was common practice at that time).

³² A total of 773 Static-99 risk assessments with no reported risk classification were done on 639 class members. The data show 488 people who had at least one Static-99 done, but for whom no risk classification corresponding to any assessment is reported.

³³ For individuals with multiple Static-99 risk assessment scores, we report only the score associated with the last assessment.

- 80. For the 4,653 people whose results were reported using the updated (2017) risk levels, including those whose results were reported using both the original and updated levels, the distribution of assigned risk levels is as follows:
 - 329 (7%) scored as Level I Very Low Risk
 - 897 (19%) scored as Level II Below Average Risk
 - 1,992 (43%) scored as Level III Average Risk
 - 1,032 (22%) scored as Level IVa Above Average Risk
 - 403 (9%) scored as Level IVb Well Above Average Risk
- 81. Again, the distribution of Static-99R risk levels is similar to the distribution in the Static-99R norms (6%, 18%, 50%, 18%, 8% for Level I, Level II, Level III, Level IVa, and Level IVb, respectively). The Michigan distribution has slightly more individuals in the above average categories (Level IVa and IVb, 31% in Michigan versus 26% in the norms); however, the Michigan sample was restricted to individuals under the jurisdiction of the Michigan Department of Corrections whereas the norms were based on the full range of individuals convicted of sexual offenses (stratified into short prison sentences [less than 2 years], long prison sentences [more than 2 years], and community sentences only). Consequently, the estimates based on the Static-99R norms should reasonably approximate the distribution of risk levels for individuals on Michigan's registry.

IX. OFFENSE HISTORY OF PEOPLE ON MICHIGAN'S REGISTRY

- 82. Offense Type: 94% of the total class (42,294 people) have a registrable offense from Michigan. A wide range of Michigan offenses result in sex offender registration, ranging from very serious crimes, like criminal sexual conduct in the first degree (M.C.L. § 750.520b, which includes forcible rape and child sexual assault), to lower-level offenses, like criminal sexual conduct in the third degree (M.C.L. § 750.520d, which includes sexual intercourse with an underage teen), and criminal sexual conduct in the fourth degree (M.C.L. § 750.520e, which includes sexual contact with an underage teen).
- 83. For people with Michigan registrable offenses (the **Michigan Conviction Group**), we analyzed how many people were convicted of which offenses. To avoid double counting a person, if the person was convicted of more than one offense, we assigned the highest-level offense (e.g., CSC 1 for a person convicted of both CSC 1 and CSC 2).³⁴

³⁴ There are a number of different offenses in the "other sex crimes category" with varying

<u>Table 5</u>
Offenses of Registrants Who Have Michigan Convictions

Registrable Offense	Total	Percent
CSC First Degree	9,575	23%
CSC Second Degree	10,545	25%
CSC Third Degree	8,909	21%
CSC Fourth Degree	5,893	14%
Other Registrable Offenses	7,372	17%

- 84. These data show that 77% of registrants with Michigan convictions (32,719 of 42,294) were convicted of offenses other than CSC 1.
- 85. Once we further broke down the data to look at the 32,484 people who have Michigan registrable offense convictions in the **In Community Group**—those registrants who are not incarcerated and who are living in Michigan communities—the percentage of registrants convicted of the most serious offenses decreases further:

<u>Table 6</u>

<u>Offenses of Registrants In the Community Who Have Michigan Convictions</u>

Registrable Offense ³⁵	Total	Percent
CSC First Degree	5,331	16%
CSC Second Degree	8,734	27%
CSC Third Degree	7,043	22%
CSC Fourth Degree	5,270	16%
Other Registrable Offenses	6,106	19%

gradations of severity. For purposes of avoiding double counting, we assigned a person to CSC 1, CSC 2, CSC 3 or CSC 4 before assigning them to "other registrable offenses" category.

³⁵ While the Michigan Conviction Group includes only people with Michigan convictions, the In Community Group includes people living in Michigan who have non-Michigan convictions. The severity of those offenses could not be determined, and they are therefore excluded from the analysis.

Thus, 84% of people in the In Community Group who have Michigan registrable offense convictions were convicted of offenses other than CSC 1. These data are important because they belie the common assumption that people on the registry have almost all committed the most serious offenses.

- 86. Out of State Offenses: SORA requires registration not just for convictions in Michigan, but also if the individual has a "substantially similar" offense from another jurisdiction, M.C.L. §§ 28.722(r)(x), (t)(xiii), (v)(viii), or is required to register in another jurisdiction, M.C.L. § 28.723(d). Of people on Michigan's registry:
 - about **42,294** (**94%**) have registrable convictions for violations of Michigan law;
 - about 3,100 (7%) have registrable convictions for violations of the law of another jurisdiction; and
 - about **296** (**1%**) have registrable convictions for both Michigan and non-Michigan offenses.³⁶
- 87. <u>Victim Age:</u> We also attempted to determine the age distribution of victims, but were unable to do so as the underlying data does not appear to be reliable.
- 88. Although the MSP data contain ages for 65,785 victims of registrable offenses committed by registrants in the total class, the entries in the victim age field are so far off from what is statistically probable that we could not use these data. The table below shows how many victims were coded as having the following ages:

³⁶ The percentages here add up to more than 100% because the individuals in the third bullet are also included in the first two bullets.

<u>Table 7</u>
Distribution of Victim Ages between Age 0 and Age 49

Age	Total	Age	Total	Age	Total	Age	Total	Age	Total
0	34,458	10	48	20	15	30	10	40	0
1	0	11	136	21	9	31	6	41	0
2	2	12	548	22	4	32	169	42	0
3	8	13	3,519	23	16	33	29	43	0
4	40	14	5,985	24	11	34	216	44	0
5	33	15	1,189	25	6,238	35	66	45	2
6	81	16	4,610	26	0	36	10	46	0
7	1,456	17	391	27	30	37	0	47	3
8	41	18	1,224	28	3	38	1	48	0
9	190	19	31	29	9	39	4,802	49	0

89. Beyond age 49, there is 1 victim aged 62, and there are 145 victims aged 99. Certain ages in the distribution, particularly ages 0, 25, and 39, each represent thousands of victims in the data while the immediately surrounding ages (i.e., ages 1, 24, 26, 38, and 40) are completely or nearly unrepresented. Given that odd distribution of ages, and the fact that 52% of victims in these data are age 0, it is clear to us that the victim age data are not reliable.

90. We also considered whether it would be possible to determine victim age by looking at the offense of conviction and counting offenses where the age of the victim is an element of the offense. However, this method too is inaccurate. First, the age categories in SORA do not always line up with the age categories in Michigan's criminal code.³⁷ Second, a person may be convicted of an offense where the victim was a minor, but the age of the victim is not an element of the offense (e.g., M.C.L. § 750.338b, gross indecency). Third, because of data limitations, it is not possible to determine if one conviction might involve multiple victims, or conversely whether there may be one victim who is the subject of multiple convictions. Finally, the data did not link victim ages to offenses.

³⁷ While the age of consent in Michigan is 16 (M.C.L. § 750.520d(1)(a); § 750.520e(1)(a)), various SORA provisions require registration, or assign higher tier classifications based on the victim being under 18. *See*, *e.g.* M.C.L. § 28.722(a)-(v). For example, M.C.L. § 750.520e—criminal sexual conduct in the fourth degree—has a specific subsection that bars sexual contact with a person aged 13-16. *See* M.C.L. § 750.520d(1)(a). However, SORA requires individuals convicted of CSC-3 to register if the victim was 13-18. *See* M.C.L. § 28.722(t)(x).

X. WOMEN ON MICHIGAN'S REGISTRY

- 91. As noted above, women make up only 2% of Michigan's total registry population and 3% of the **In Community Group**.
- 92. Of the 1,063 women on the registry, about 92% (975 women) have never been convicted of a second registrable offense after their initial conviction. Of the 945 women in the In Community Group, 98% (922 women) have never been convicted of a second registrable offense.

XI. CHILDREN ON MICHIGAN'S REGISTRY

- 93. There are **2,037** people **(5%)** who are on Michigan's registry for a juvenile adjudication as a child. We were not able to determine from the data how many additional individuals committed their registrable offenses as children, but were charged and convicted as adults.
- 94. The number of children required to register is important because, as set out in the expert report of Elizabeth Letourneau, ECF 1-5, ¶ 10, the recidivism rates for people who commit sexual offenses as children are very low. Of the 2,037 child registrants, 99% (2,012 child registrants) have never been convicted of a second registrable offense.
- 95. <u>Demographics of Those Registered as Children</u>: 98% of child registrants (1,991 children) are male and 2% of child registrants (46 children) are female.
 - 96. The racial demographics of this group are:
 - about 1,504 (74%) are white;
 - about 476 (23%) are Black/African-American;
 - about 25 (1%) are Latino/Hispanic;
 - about 32 (2%) are other groups.
- 97. Although the data did not include the age of child registrants at the time of the offense, we attempted to calculate this by comparing the child's birth date and offense date. Because of missing or unreliable data (e.g., missing offense dates), we were able to calculate the age at the time of offense for 1,665 children (82%). The breakdown for the age of the 1,628 registrants who were children (i.e., under 18 years old³⁸) at the time of the offense is:

³⁸ These data showed that 37 of these registrants with juvenile adjudications were age 18 or over on the offense date of their first registrable offense. Because it is unclear how a person would be adjudicated as a juvenile if over 18, we excluded these data.

- About 52 (3%) were under 14 years old;
- about **312 (19%)** were 14 years old;
- about **569** (**35%**) were 15 years old;
- about **480** (**30%**) were 16 years old;
- about **215 (13%)** were 17 years old.

98. The breakdown of all 2,037 child registrants' current ages is:

- none are under 16 years old;
- about **57** (**3%**) are 16 19 years old;
- about **439 (22%)** are 20 29 years old;
- about **859** (42%) are 30 39 years old;
- about **679** (33%) are 40 49 years old;
- about 3 (0.1%) are 50 59 years old;
- none are 60 years old or over.

XII. COMPARING PEOPLE IN DIFFERENT TIER LEVELS

- 99. As discussed above, Michigan's registry categorizes people into three tiers, which determine how many years people are subject to SORA and how frequently they must report. Those tiers are based solely on the offense of conviction, without any individualized determination of risk. See M.C.L. §§ 28.722(q)-(v). Tier III requires lifetime registration and quarterly reporting; Tier II requires 25-year registration and biannual reporting; and Tier I requires 15-year registration and yearly reporting. M.C.L. §§ 28.725(11)-(13); 28.725a(3). 73% of registrants are Tier III, 20% are Tier II, and 7% are Tier I. See Section V.
- 100. Tier II and Tier III registrants (other than those with juvenile adjudications) are on the online public registry. M.C.L. §§ 28.728(2), (4). Some Tier I registrants are on the offline law enforcement registry, while other Tier I offenses require public registration. M.C.L. § 28.728(4)(c).
- 101. We compared the Static 99/R risk scores, discussed in Section VIII, for people in different tier levels. The data show:

Table 8
Static-99 Scores, Earlier Version of Assessment, by Tier Level

Risk Level	Tier I	Tier II	Tier III	Whole Class
Low Risk	15%	24%	38%	36%
Low-Moderate Risk	35%	35%	34%	34%
Moderate-High Risk	33%	32%	21%	22%
High Risk	17%	10%	8%	8%

<u>Table 9</u> <u>Static-99R Scores, Current Version of Assessment, by Tier Level</u>

Risk Level	Tier I	Tier II	Tier III	Whole Class
Level I – Very Low Risk	1%	2%	8%	7%
Level II – Below Average Risk	9%	8%	21%	19%
Level III – Average Risk	27%	46%	43%	43%
Level IVa – Above Average Risk	40%	30%	21%	22%
Level IVb – Well Above	23%	14%	7%	9%
Average Risk				

- 102. What these data show is that a higher tier level does not correspond to a higher risk level. In fact, tier levels are inversely correlated to risk: people in Tier I have the highest risk scores, Tier II the next highest, and Tier III the lowest. Specifically, 63% of the people in Tier I were above average risk on Static-99R, compared to 44% of the people in Tier II, and 28% of the individuals in Tier III. Such a pattern should not be surprising given that Michigan's tier placement is based on the offense of conviction, which is not empirically related to the likelihood of sexual recidivism. Placing individuals in the wrong tiers would have little effect on public safety because there is no evidence that any form of registration reduces sexual victimization or reduces sexual recidivism; however, placing lower risk individuals in the highest tier misleads the public who would (falsely) assume that higher tier placement communicates a greater risk of sexual recidivism.
- 103. These Michigan data are consistent with the broad consensus in the scientific literature that the likelihood of recidivism is unrelated to the names of offense convictions. In other words, using the offense of conviction to create tiers of ostensible future dangerousness does not work.

104. As discussed above in Section VII, time offense-free in the community is strongly correlated with reductions in recidivism. We therefore analyzed how much time people in different tiers have spent offense free in the community.

Table 10
Time Offense-Free in the Community by Tier Level

Time Period	Tier I	Tier II	Tier III	Whole Class
0-2 years	14%	7%	6%	7%
2 – 5 years	25%	12%	11%	12%
5 – 10 years	36%	19%	16%	18%
10 – 15 years	26%	20%	16%	18%
15 – 20 years	0%	21%	14%	15%
> 20 years	0%	20%	38%	31%

105. These data show that Tier III registrants have spent more time offense free in the community than Tier II registrants, who have spent more time offense free in the community than Tier I registrants. This is unsurprising, given that Tier III requires lifetime registration, Tier II requires 25-year registration, and Tier I requires 15 years registration. It also provides strong evidence that Tier III does not represent a high-risk group. Two-thirds (68%) of the people in Tier III have spent more than 10 years in the community without incurring another sexual offense conviction, and 38% have spent more than 20 years without a new sexual offense conviction. It does not take complicated statistical analyses to recognize that most of these people did not present an imminent risk for sexual recidivism when they were required to register. If you accept the strong evidence that time in the community without a new sex offense conviction reduces the likelihood of future recidivism, these data also indicate that the higher tiers are populated by many people who present no more risk of reoffending than males in the general population.

XIII. REGISTRANTS' EMPLOYMENT, HOUSING, AND INTERNET USE

106. Registrants are required to regularly verify as well as report changes to information about their employment, housing, internet use, etc. M.C.L. §§ 28.725; 28.727. The MSP data contained information about employment, housing, and internet identifiers.

107. In analyzing this data, we restricted our analysis to the **In Community Group**—those subject to SORA's reporting requirements, as they live, work or go

to school in Michigan—and excluded those who are incarcerated. We also excluded registrants listed as "absconders," as they will have had periods of non-reporting.

A. Employment

- 108. We leveraged the address and date data in the MSP data to estimate the total number of registrants with current employment. We count any work address without an end date (i.e., the date after which the work address is no longer current for the registrant) as current employment.
- 109. Of the 35,235 registrants in the In Community Group, 55% (19,230 people) reported current employment of some kind.³⁹ Of these, 14% of all currently employed registrants in the In Community Group (2,603 people) reported current employment at two or more business addresses. The data do not show if they were employed full or part time. Of the registrants in the In Community Group, 45% (16,005 people) did not report current employment.
- 110. The unemployment rate in Michigan in January 2023 when the MSP data was provided was 4.3%.⁴⁰

B. Housing

- 111. The MSP data also contains residential addresses, as well as a notation for whether a person is homeless. It is our understanding that historically, unhoused people have been required to report a general location (e.g., city, but not street address). The residential address data for some registrants shows such general locations.
- 112. Of the 35,235 registrants in the **In Community Group**, 1,037 people (3%) were officially designated as "homeless" as of January 24, 2023. There are an additional 45 people who are not currently officially designated as "homeless" but whose current street address fields are blank or otherwise denote unhoused status (for example, some street address fields describe the intersection of two streets, some explicitly say "Homeless," and some describe registrants' vehicles). We assume that between 1,037 and 1,082 registrants in the In Community Group are currently unhoused.
- 113. Using the officially designated "homeless" label, of the 35,235 registrants in the **In Community Group**, 9% (3,139 people) reported being unhoused at some point since they began registering. Limiting the analysis to the 25,763 people in the

³⁹ Employment addresses include those related to self-employment and rental property, along with traditional employment.

⁴⁰ Michigan Labor Market Statistics 1970-2023, https://www.senate.michigan.gov/sfa/Economics/MichiganLaborForce.PDF.

In Community Group who have reported their addresses for at least ten years (i.e., their initial release date is on or prior to January 24, 2013), we find 10% (2,518 people) have reported being unhoused at some point.

- 114. Using expanded criteria for identifying unhoused registrants (also including instances where the street address field is blank or otherwise denotes unhoused status), of the 35,235 registrants in the In Community Group, we identify 11% (3,764 people) who have reported being unhoused at some point since they began registering. Limiting the analysis to the 25,763 people in the In Community Group who have reported their addresses for at least ten years, we find 12% (3,049 people) have reported being unhoused at some point since they began registering.
- 115. These numbers may understate the percentage of registrants who have been unhoused, as we were unable to account for individuals who report shelter addresses. In addition, due to time and data constraints, we were unable to analyze housing instability. However, even a cursory review of the data shows that many registrants report frequent address changes.

C. Internet Use

- 116. SORA requires post-2011 registrants to report "all electronic mail addresses and internet identifiers registered to or used by the individual." M.C.L. § 28.727 (1)(i).
- 117. For this analysis, we restricted our query to the 8,153 members of the In Community Group who are required to report such information (i.e., with an offense date on or after July 1, 2011). In that group, 62% (5,061 people) reported at least one email address or electronic identifier. 38% (3,092 people) did not report any email addresses or electronic identifiers. Only 60% (4,909 people) reported using email, and only 24% (1,968 people) reported using some other non-email internet identifier (e.g., Facebook, Instagram).
 - 118. By contrast, 93% of adult Americans use the internet.⁴¹

XIV. DATA ON ENFORCEMENT

A. Absconders, Compliance and Non-Compliance

119. Only **33** registrants **(0.1%)** in the **In Community Group** are listed as "absconders," presumably individuals who are not reporting.

⁴¹ Pew Research, "Internet/Broadband Fact Sheet." Accessed 27 September 2021. https://www.pewresearch.org/internet/fact-sheet/internet-broadband/.

- 120. However, many more registrants are listed as "non-compliant." For the **In Community Group**, the data shows whether they are "compliant" or "non-compliant," and if non-compliant, the type of non-compliance.
- 121. In this group 90% (31,648 people) were compliant, and 10% (3,582 people) were non-compliant.
 - 122. The breakdown for types of non-compliance is:

Table 11
Reasons for Noncompliance

	Total	Percent ⁴²
Reasons for current non-		
compliance		
Identification violation	2,218	62%
Fee violation	881	25%
Verification violation	648	18%
Palm print violation	448	13%
Address violation	33	1%
Failed to register violation	22	1%
False information violation	12	0.3%
Form violation	7	0.2%
Employment violation	6	0.2%
Phone violation	4	0.1%
Vehicle violation	3	0.1%
Internet violation	3	0.1%
Professional license violation	1	0.03%

123. In 87% of cases there were issues with the fees required under SORA or with identification.

 $^{^{42}}$ These numbers at up to more than 100%, as some registrants had more than one reason for non-compliance.

B. Residence Checks

124. For the **In Community Group**, the data shows that there were 61,905 residence checks done during the period from January 1, 2011, to March 1, 2020.⁴³

XV. CLASS AND SUBCLASS INFORMATION

- 125. We were asked to determine the size and composition of the primary class and subclasses, to the extent possible. For some of the subclasses this determination was relatively straightforward. For others, it was extremely complex. The numbers provided should be understood as best estimates, subject to revision, given the complexity of the analysis involved. We were not able to complete this analysis for all the subclasses in the available time, but will continue to work on doing so.
- 126. The chart in Exhibit B provides more details about the analysis for each subclass. As noted above, the MSP provided the class data on January 24, 2023. Given that additional people have likely been added to the registry since then, the numbers here may slightly understate the current class and subclass sizes.

A. Primary Class

- 127. The primary class is defined as: "people who are or will be subject to registration under Michigan's Sex Offenders Registration Act (SORA)." Stipulated Class Certification Order, ECF 35, ¶ 2.
- 128. The primary class is composed of approximately 45,145 people. This includes registrants who are living, working, or studying in the state, incarcerated people, and registrants who were convicted of a Michigan registrable offense on or after July 1, 2011 and who are now living out of state.⁴⁴

B. Pre-2011 Ex Post Facto Subclass

- 129. This sub class is defined as members of the primary class who committed the offense(s) requiring registration before July 1, 2011. ECF 35, \P 3.
- 130. There are approximately 31,249 registrants (69% of the class) in this subclass. In identifying this subclass, we used the offense date for the final registrable offense on record where available. For 3,481 people, the offense date for

⁴³ We excluded data from after March 2020 because residence checks were likely impacted by the COVID-19 pandemic.

⁴⁴ We also included people whose registration status is pending review (186 people; 0.4%) as they most likely "will be subject to registration," although that group is so small that it is not statistically significant; people whose status pending-out-of-state, and people whose whereabouts were unknown.

their last registrable offense was not available, and we used the conviction date for their last registrable offense instead. For 48 people, neither the offense date nor the conviction date for their last registrable offense were available, so we assume those individuals are not part of this subclass.

C. Retroactive Extension of Registration Subclass

- 131. This subclass is defined as members of the primary class who were retroactively required to register for life as a result of amendments to SORA. ECF 35, ¶ 4.
- 132. Our best estimate at this time is that there are approximately 16,723 registrants (37% of the Primary Class) in this subclass.
- 133. The data we received did not indicate whether a person's registration term has been extended. Therefore, in order to determine membership in this subclass, we had to run a series of queries that identified people who are currently required to register for life, but whose registrable offenses, at the time committed, did not result in lifetime registration. Class counsel, based on their analysis of the legislative history of SORA, provided us with the parameters for those queries, which are attached as Exhibit B.1.
- 134. The analysis for this subclass is very complicated due to the number of statutory changes over time, the complexity of the relevant data, and the programming required. The estimate provided is just that, an estimate, and does not account for every variable involved.

D. Barred From Petitioning Subclass

135. The barred from petitioning subclass is defined as:

members of the primary class who are ineligible to petition for removal from the registry and for whom ten or more years will have elapsed since the date of their conviction for the registrable offense(s) or from their release from any period of confinement for that offense(s), whichever occurred last, and who (a) have not been convicted of any felony or any registrable offense since; (b) have successfully completed their assigned periods of supervised release, probation, or parole without revocation at any time of that supervised release, probation, or parole; and (c) have successfully completed an appropriate sex offender treatment program, if successful completion of a sex offender treatment program was a condition of the registrant's confinement, release, probation, or parole.

ECF 35, ¶ 5.

136. Due to the complexity of the analysis, limitations in the data sets, the need

to match various data sets, and time constraints, we have not yet been able to estimate the number of people in this subclass. We are continuing to work on estimating the size of this subclass.

E. Non-Sex Offense Subclass

- 137. SORA requires individuals convicted of certain offenses that do not have a sexual component to register as sex offenders, namely kidnapping (M.C.L. § 750.349)⁴⁵, unlawful imprisonment (§ 750.349b), and child enticement (§750.350). *See* M.C.L. § 28.722(r)(iii), (v)(ii)-(iii).
 - 138. The non-sex offense subclass is defined as:

members of the primary class who are or will be subject to registration for an offense without a sexual component including convictions for violating M.C.L. § 750.349 (other than convictions for violating M.C.L. § 750.349(1)(c) or M.C.L. § 750.349(1)(f)), § 750.349b, § 750.350, or a substantially similar offense in another jurisdiction.

ECF 35, ¶ 6. The subclass thus includes both individuals with Michigan convictions for the specified offenses, as well as people with "a substantially similar offense in another jurisdiction."

- 139. We estimate that 298 people (0.7% of the class) are members of this subclass.
- 140. There are 276 people with Michigan convictions that are members of this subclass. To identify this group, we ran queries to identify all class members convicted of violating M.C.L. § 750.349 (other than convictions for violating M.C.L. § 750.349(1)(c) or M.C.L. § 750.349(1)(f)), § 750.349b, and § 750.350.
- 141. In addition, individuals who have non-Michigan convictions that are "substantially similar" to such offenses must register. M.C.L. § 28.722(r)(x), (t)(xiii), (v)(viii). The data we received does not show which non-Michigan offenses are considered "substantially similar" to the specified Michigan offenses. Plaintiffs' counsel informed us that they sought, but were unable to obtain, documents from Defendants showing which non-Michigan offenses the MSP deems to be "substantially similar" to the specified Michigan offenses.
- 142. In order to estimate the number of people who are subject to registration for "substantially similar" non-sex-offense convictions in other jurisdictions, we first calculated that 276 people convicted of non-sex offenses in Michigan represent 0.7%

⁴⁵ Subsections (1)(c) or (1)(f) of the kidnapping statute, M.C.L. § 750.349 require a sexual component to the crime.

of the total 42,294 people with Michigan convictions. If a similar percentage applies to the 3,100 people with non-Michigan convictions, then there would be approximately 22 people subject to registration for non-sex offenses from jurisdictions other than Michigan.

143. Adding the 276 people with Michigan non-sex offenses to the estimated 22 people with "substantially similar" non-sex-offense convictions from other jurisdictions, led to our estimate that 298 people are members of this subclass.

F. Plea Bargain Subclass

144. This subclass is defined as:

members of the primary class who gave up their right to trial and pled guilty to a registrable offense in Michigan and who, as a result of retroactive amendments to SORA, (a) were retroactively subjected to SORA even though there was no registration requirement at the time of their plea; or (b) had their registration terms retroactively extended beyond that in effect at the time of their plea.

ECF 35, ¶ 7.

145. Due to the complexity of the analysis, limitations in the data sets, the need to match various data sets, and time constraints, we have not yet been able to estimate the number of people in this subclass. We are continuing to work on estimating the size of this subclass.

G. Post-2011 Subclass

- 146. This subclass is defined as "members of the primary class who committed the offense(s) requiring registration on or after July 1, 2011."
- 147. There are approximately 13,848 registrants (31% of the class) in this subclass. In identifying this subclass, we used the offense date where available, and the conviction date for the 55 people for whom the offense date was not available. There are 48 people for whom neither the offense date nor the conviction date for any registrable offenses were available; we assume these individuals are not part of this subclass.

H. Non-Michigan Offense Subclass

- 148. This subclass is defined as members of the primary class who, according to Defendants, are or will be subject to sex offender registration under SORA 2021 for a conviction or adjudication from a jurisdiction other than Michigan.
- 149. There are approximately 3,100 registrants (7% of the class) who have a conviction or adjudication from a jurisdiction other than Michigan and are

in this subclass.

XVI. ADDITIONAL DATA ANALYSIS

- 150. Due to time and resource constraints, it was not possible to complete all of the data analysis that we had hoped to accomplish before the deadline for this report. Accordingly, we anticipate continuing to refine our data analysis in advance of any evidentiary hearing or trial in this case.
- 151. We also recognize that, if the Court grants relief to the Plaintiffs in this case, additional data analysis may be required for purposes of determining remedies, and we may conduct further analysis to inform the Court's potential decisions on remedy. We can develop more precise determinations of subclass composition with additional time.
- 152. Finally, should the Court identify particular questions where further data analysis may be useful, we can attempt, depending on data, resource and time constraints, to respond to those questions.

XVII. STATEMENT OF COMPENSATION

153. German Marquez Alcala and James J. Prescott have worked on this report pro bono. Karl Hanson has charged his customary rate of \$250/hour for his contributions to this report.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

German Marquez Alcala

James J. Prescott

J-IPA

R. Karl Hanson

R.K. Hu

Dated: August 7, 2023

EXHIBIT A

CURRICULUM VITAE OF GERMAN A. MARQUEZ ALCALA

German A. Marquez Alcala

University of Michigan Law School | Ann Arbor, MI | gmarquez@umich.edu | Office: (734) 763-1760

EDUCATION

University of Michigan | Ann Arbor, MI | 2016–2018

M.A., Economics

PURDUE UNIVERSITY | WEST LAFAYETTE, IN | 2014–2016

M.S., Agricultural Economics

Thesis: "The Labor Market Consequences of Endogenous Low-Skill Migration with a Market-Based Immigration Policy," selected for a presentation at the Annual Meeting of the Agricultural & Applied Economics Association

CALIFORNIA STATE UNIVERSITY, FRESNO | FRESNO, CA | 2010–2014

B.S., summa cum laude, Agricultural Business, Minor in Philosophy

with University Honors via Smittcamp Family Honors College

with College Honors via College of Arts and Humanities Honors Program

Undergraduate Honors Thesis: "An Ethical Analysis of American Immigration Policy: A Kantian Approach," selected for a presentation at the California State University Honors Consortium Conference

RESEARCH INTERESTS

How disadvantaged populations in the U.S. engage with legal and economic systems of power; courts and procedural law; the role of technology in legal and government decision-making.

RESEARCH EXPERIENCE

UNIVERSITY OF MICHIGAN LAW SCHOOL

Research Associate for Empirical Legal Studies

Jan. 2019–Present

I use quantitative research skills to help law faculty shepherd their empirical research projects from concept to publication. I acquire and manage data, brainstorm research questions and provide methodology consultations, perform rigorous statistical analyses, and help draft and edit manuscripts for publication. Notable work from this experience includes:

- Studying criminal record expungements and their labor market and public safety consequences (for Profs. J.J. Prescott & Sonja Starr; published in *Harvard Law Review*)
- Comparing pro se litigant discrimination in online and face-to-face courts (for Profs. J.J. Prescott, Orna Rabinovich-Einy & Avital Mentovich; published in *Alabama Law Review*)
- Studying litigant perceptions of online courts' legitimacy (for Profs. J.J. Prescott, Orna Rabinovich-Einy & Avital Mentovich; published in Law & Society Review)
- Using difference-in-difference and survival analysis methods to study the impact of online dispute resolution in small claims court (for Prof. J.J. Prescott; published in a research volume)
- Compiling and visualizing complex datasets on jails, prisons, and court filings to study the civil rights of incarcerated people, resulting in rich data appendices for an incarceration-focused legal casebook and an article for *Prison Policy Institute* (for Prof. Margo Schlanger)
- Analyzing data from the National Registry of Exonerations for a report on the prevalence of misconduct by police officers, prosecutors, and other officials and its connection to wrongful convictions (for Prof. Samuel Gross)
- Providing editorial assistance for a volume summarizing empirical legal research of sex offender registration and notification laws (Wayne A. Logan & J.J. Prescott, eds., SEX OFFENDER REGISTRATION AND NOTIFICATION LAWS: AN EMPIRICAL ASSESSMENT, Cambridge University Press, 2021)

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- Using natural language processing methods to understand the role of unrepresented litigants' informal written language in online courts (for Profs. J.J. Prescott, Orna Rabinovich-Einy, David Jurgens, Rob Voigt & Avital Mentovich; ongoing)
- Studying homeowners' ability to understand consumer insurance contracts (for Profs. Kyle Logue, Daniel Schwarcz & Brenda Cude; ongoing)
- Editing questionnaires, performing database maintenance, and creating annual response reports for the U-M Law School Alumni Survey Project

PURDUE UNIVERSITY DEPARTMENT OF AGRICULTURAL ECONOMICS

Graduate Research Assistant for Professor Thomas Hertel

June-Dec. 2015

Compiled data and created visualizations for an analysis of global land use, poverty in the developing world, and the effects of climate change; published in *Nature Climate Change*.

Graduate Research Assistant for Interdisciplinary Climate Research Team

Jan.-Sep. 2015

Synthesized scholarship from development economics, ecology, psychology, and cultural anthropology and helped write a comprehensive literature review on conditional cash transfers for an interdisciplinary NSF grant; published in *World Development*.

Graduate Research Assistant for Professor Joseph Balagtas

Aug.-Dec. 2014

Wrote a literature review on rice production, poverty impacts of price volatility of staple crops, and existing government interventions for price volatility in the Philippines.

TEACHING EXPERIENCE

UNIVERSITY OF MICHIGAN DEPARTMENT OF ECONOMICS

Graduate Student Instructor

Sep. 2017–Apr. 2018

Taught four sections of Principles of Economics I; supervised by Dr. Ronald Caldwell.

CONFERENCE PRESENTATIONS

NLP@Michigan Conference, Ann Arbor, MI, 2022

Annual Meeting of Agricultural and Applied Economics Association (AAEA), Boston, MA, 2016

California State University Honors Consortium Conference, Fullerton, CA, 2014

Voicing Ideas Philosophy Conference, Fresno, CA, 2013

HONORS & AWARDS

Rackham Merit Fellowship, University of Michigan, 2016–2018

Purdue Doctoral Fellowship, Purdue University, 2014–2016

President's Medalist, California State University, Fresno, 2014

Dean's Medalist, Jordan College of Agricultural Sciences & Technology, California State University, Fresno, 2014

President's Honors Scholarship, Smittcamp Family Honors College, California State University, Fresno, 2010–2014

Newman Civic Fellowship, 2013

President's Volunteer Service Award, 2013

EXHIBIT B

REGISTRANT GROUPS

This chart summarizes how we identified the registrants in various groups that were used for purposes of data analysis, as well as how we identified the subclasses.

Group	Who Is Included	How the Group Was Identified in the Data	Estimated Number of Registrants
Primary Class/Total Registrants	People who are or will be subject to registration under SORA.	We began with all registrants for whom we received data, and identified a total of 53,605 people with unique registration numbers. We then removed registrants who no longer live, work or attend school in Michigan, and who do not have a Michigan registrable conviction on or after July 1, 2011.	45,145
In Michigan Group	Registrants who live, work, or attend school in Michigan, including people who are incarcerated.	The "status" fields included here are: absconder, active, employment only, homeless, incarcerated, pending out of state, pending review, school only, and whereabouts unknown.	44,154 (98% of Primary Class)
In Community Group	Registrants who live, work or attend school in Michigan, and are not incarcerated.	The "status" fields included here are: absconder, active, employment only, homeless, pending out of state, pending review, school only, and whereabouts unknown.	35,235 (80% of In Michigan Group)

Incarcerated Group	Registrants who are incarcerated.	The status field here is: incarcerated.	8,919 (20% of In Michigan Group)
Left Michigan Group	Registrants who no longer live, work or attend school in Michigan, but who are required to register because they have a Michigan registrable conviction on or after July 1, 2011. See M.C.L. § 28.723(3). These registrants are not subject to ongoing reporting requirements or public registration.	The status field here is: out of state. In addition, we excluded individuals who do not have a Michigan registrable conviction on or after July 1, 2011.	991 (2% of Primary Class)
Michigan Conviction Group	Registrants with Michigan convictions.	We identified all people who had at least one registrable offense where the entry in the field for "conviction state" was Michigan.	42,294 (94% of Primary Class)
Pre-2011 Ex Post Facto Subclass	Members of the primary class who committed offenses requiring registration before July 1, 2011.	We identified all people where the "committed" date field (or fields if there are multiple offenses) was before July 1, 2011, and who did not have any registrable offenses committed on or after July 1, 2011. If the committed date field was blank, the "convicted" date field was used.	31,249 (69% of Primary Class)

Retroactive	Members of the primary class	To determine membership in this sub-	People with
Extension of	who were retroactively required	class, we had to run a series of queries	Michigan
Registration	to register for life as a result of	that identify people who are currently	convictions:
Subclass	amendments to SORA.	required to register for life, but whose	15,582 (35% of
		registrable offenses, at the time commit-	Primary Class)
		ted, did not result in lifetime registration.	,
		See Exhibit 1 for a detailed explanation.	Total counting
		Because of the complexity of the statu-	Michigan and
		tory changes, as well as the complexity	non-Michigan
		of the data, these numbers are not exact,	convictions:
		but rather are the best estimates we could	16,723 (37% of
		make within the available time.	Primary Class)
Barred from	Members of the primary class	Due to the complexity of the analysis,	Unknown at this
Petitioning	who are ineligible to petition	limitations in the data sets, the need to	time.
Subclass	for removal from the registry	match various data sets, and time con-	
	and for whom ten or more	straints, we have not yet been able to	
	years will have elapsed since	estimate the number of people in this	
	the date of their conviction for	subclass.	
	the registrable offense(s) or		
	from their release from any		
	period of confinement for that		
	offense(s), whichever occurred		
	last, and who (a) have not been		
	convicted of any felony or any		
	registrable offense since; (b)		
	have successfully completed		
	their assigned periods of		
	supervised release, probation,		

	or parole without revocation at any time of that supervised release, probation, or parole; and (c) have successfully completed an appropriate sex offender treatment program, if successful completion of a sex offender treatment program was a condition of the registrant's confinement, release, probation, or parole.		
Non-Sex Offense Subclass	Members of the primary class who are or will be subject to registration for an offense without a sexual component including convictions for violating M.C.L. § 750.349 [other than convictions for violating M.C.L. § 750.349(1)(c) or M.C.L. § 750.349(1)(f)], § 750.349b, § 750.350, or a substantially similar offense in another jurisdiction	We first identified all members of the primary class with convictions for violating: • M.C.L. § 750.349 [other than convictions for violating M.C.L. § 750.349(1)(c) or M.C.L. § 750.349(1)(f)], • M.C.L. § 750.349b, and • M.C.L. § 750.350. Then, to estimate the number of people with "substantially similar" non-sex offenses in other jurisdictions, we calculated what percent of the Michigan Conviction Group had convictions for non-sex offenses (0.7%). We then applied	People with Michigan convictions: 276 People with substantially similar offenses in another jurisdiction: Estimated to be 22. Total: 298

Plea Bargain Subclass	Members of the primary class who gave up their right to trial and pled guilty to a registrable offense in Michigan and who, as a result of retroactive amendments to SORA, (a) were retroactively subjected to SORA even though there was no registration requirement at the time of their plea; or (b) had their registration terms retroactively extended beyond that in effect at the time of their plea.	that percentage to the total number of people with non-Michigan convictions to estimate the number of people subject to registration for non-sex offenses from other jurisdictions. Due to the complexity of the analysis, limitations in the data sets, the need to match various data sets, and time constraints, we have not yet been able to estimate the number of people in this subclass.	Unknown at this time.
Post-2011 Subclass	Members of the primary class who committed the offense(s) requiring registration on or after July 1, 2011.	We identified all members of the primary class, where the "committed date" field had a date on or after 7/1/2011. If the committed date field was blank, the "conviction date" field was used.	13,848 (31% of Primary Class)
Non- Michigan Offense Subclass	Members of the primary class who are or will be subject to sex offender registration under Mich. Comp. Laws 28.722(r)(x);	We identified all primary class members who have a conviction or adjudication from a jurisdiction other than Michigan.	3,100 (7% of Primary Class)

(t)(xiii); (v)(viii); or 28.723(1)	
(d), for a conviction or adjudi-	
cation from a jurisdiction other	
than Michigan.	

EXHIBIT 1:

IDENTIFICATION OF

RETROACTIVE EXTENSION OF REGISTRATION SUBCLASS

This class is defined as members of the primary class who were retroactively required to register for life as a result of amendments to SORA. To determine membership in this subclass, we had to run a series of queries to identify people who are currently required to register for life, but whose registrable offenses, at the time committed, did not result in lifetime registration.

Because we did not receive data about prior registration terms or about which class members had their registration terms extended, we tried to identify the subclass by looking to alterations in SORA over time. In other words, we needed to identify all individuals who were convicted of registrable offenses within a particular date range (when specific prior versions of SORA were in effect) and who are now required to register for life. We then excluded those whose offenses required them to register as lifetime registrants under the statute in effect at the time of their offense. Because offense commission data was incomplete, we used conviction date data.

The date and offense parameters were provided to us by class counsel based on their review of the legislative history of SORA. Due the complexity of the statutory changes over time, these parameters are approximations, and do not account for every instance in which a person may have been retroactively required to register. Citations to the relevant statutes are provided below.

Analysis for Michigan Conviction Group

- 1. We first identified all people within the Michigan Conviction Group who are subject to lifetime registration.
- 2. Within that group, we then identified those who were convicted for their only registrable offense(s) prior to October 1, 1995. Because the initial version of SORA did not come into effect until that date, people with offenses before that date were not subject to registration at all at the time of their offense.
- 3. For the remaining people who were convicted of a registrable offense on or after October 1, 1995, we excluded the following individuals whose offenses were already subject to lifetime registration at the time they were committed:

- a. People who were convicted of their first registrable offense on or after October 1, 1995, and before September 1, 1999, and who were convicted of a second or subsequent registrable offense after October 1, 1995. *See* Mich. Pub. Act 295, §5(4) (1994).
- b. People who were convicted of a registrable offense(s) on or after September 1, 1999, and before October 1, 2002, and whose registrable offense was for any of the following offenses.
 - i. Mich. Comp. Laws § 750.520b (criminal sexual conduct in the first degree) (including all subsections).
 - ii. Mich. Comp. Laws § 750.520c (criminal sexual conduct in the second degree) (including all subsections).
 - iii. Mich. Comp. Laws § 750.349, if the victim was less than 18 years of age (kidnapping) (including all subsections).
 - iv. Mich. Comp. Laws § 750.350 (leading away of a child) (including all subsections).
 - v. Mich. Comp. Laws § 750.145c(2) or (3) (production or distribution of child sexually abusive material).
 - vi. An attempt or conspiracy to commit an offense described in (i) to (v) above. (The way the data was provided, the searches above included attempts or conspiracy.)
 - vii. A second or subsequent offense after October 1, 1995 (meaning having been convicted of more than one registrable offense, at least one of which involved a conviction after October 1, 1995).¹

See Mich. Pub. Act 85, § 5(7) (1999).

- c. People who were convicted for a registrable offense or offenses on or after October 1, 2002, and before July 1, 2011, and whose registrable offense was for any of the following offenses.
 - i. Mich. Comp. Laws § 750.520b (criminal sexual conduct in the first degree) (including all subsections).
 - ii. Mich. Comp. Laws § 750.520c(1)(a) (criminal sexual conduct in the second degree, person under 13) (only this subsection)

¹ The statute here has further parameters, which were too complex to include.

- iii. Mich. Comp. Laws § 750.349, if the victim was less than 18 years of age (kidnapping) (including all subsections).
- iv. Mich. Comp. Laws § 750.350 (leading away of a child) (including any subsections).
- v. Mich. Comp. Laws § 750.145c(2) or (3) (production or distribution of child sexually abusive material).
- vi. An attempt or conspiracy to commit an offense described in (i) to (v) above. (The way the data was provided, the searches above included attempts or conspiracy.)
- vii. A second or subsequent offense after October 1, 1995 (meaning having been convicted of more than one registrable offense, at least one of which involved a conviction after October 1, 1995).²

See Mich. Pub. Act 542, § 5(7) (2002).

- d. People who were convicted of a registrable offense of offenses on or after July 1, 2011, are subject to lifetime registration, and:
 - i. Who have more than one conviction for a registrable offense.³
 - ii. Whose only registrable offense(s) are on or after July 1, 2011.

See Mich. Pub. Act 17 § 2(v) (2011).

- 4. After excluding the individuals in No. 3, we were left with people whose offenses were committed on or after October 1, 1995, and who were not subject to lifetime registration at the time their offense was committed.
- 5. We added No. 2 and No. 4 to identify people with Michigan convictions who likely had their registration terms retroactively extended to life.

Analysis for People with Convictions From Other Jurisdictions

Because the Michigan State Police has not recorded what out-of-state offenses it considers "substantially similar" to in-state offenses, we could not determine

² The statute here has further parameters, which were too complex to include.

³ The statutory provision itself requires lifetime registration for people in Tier II who are subsequently convicted of a Tier I or Tier II offense. Mich. Comp. Laws § 28.722(u)(i). A person in Tier I who is subsequently convicted of Tier I or Tier II offense is not automatically subject to lifetime registration. The criteria used here thus may exclude some individuals who were retroactively extended to life, thereby reducing the number of individuals in the subclass. However, due to the complexity of the data, we used this approximation.

precisely which people with out-of-state convictions would no longer be subject to registration or would have shorter registration terms if amendments to SORA had not retroactively extended their registration terms to life. However, we were able to estimate the number of individuals impacted as follows:

We calculated that 15,582 people, or 36.8% of the 42,294 people in the Michigan Conviction Group, have had their registration term retroactively extended to life. Applying that same percentage to the 3,100 people with non-Michigan convictions (the Non Michigan Offense Subclass), we estimate that 1,141 people with non-Michigan convictions are members of the Retroactive Extension of Registration Subclass.

Totals

We estimate that there are 16,723 people in the Retroactive Extension of Registration Subclass (15,582 people in the Michigan Conviction Group and 1,141 people with non-Michigan offenses). Thus, approximately 37% of the total class are members of the Retroactive Extension of Registration Subclass. This is a rough estimate, subject to revision.